# ACOUSTICAL PLASTER

THE KELLEY ISLAND LIME & TRANSPORT CO., CLEVELAND 14, OHIO

# KILNOISE Acoustical Plaster

Seven years ago Kelley Island, manufacturers of the famous Tiger Brand Finish Lime, realized the need for an improved Acoustical Plaster. A low cost, acoustically efficient, easily applied material of pleasing appearance was defined as the original product requirements. The Kelley Island Research Department undertook the development of such a product. Concentrated research and thousands of tests resulted in "KILNOISE ACOUSTICAL PLASTER".

Today Kilnoise is a tested and proved Acoustical Plaster. It has been specified by outstanding architects and applied by the finest plastering contractors throughout the United States.

Kilnoise Acoustical Plaster achieves its acoustical value through the absorption of sound energy on the sides of the interconnecting perforations and pores circulating through the applied material.

During the mixing of Kilnoise, a bubble-like foam is created which separates the particles, doubling the volume of the plaster. After trowelling, the pore filled Kilnoise dries in place, covering the ceiling with a one-piece, mineral fibered, air channeled, light weight mat. The surface is then perforated to direct the sound waves to the interior of the material, where the sound energy is absorbed.

Kilnoise Acoustical Plaster assures satisfactory application because all of its characteristics can be checked visually: foaming in the mixer, 2. thickness of the material applied, and 3. perforation of the surface.

With this knowledge, the architect may recommend with confidence the use of Kilnoise Acoustical Plaster, knowing that the desired noise reduction will be obtained.

## KILNOISE FEATURES

1. High Sound Absorption — Tests by the National Bureau of Standards give the following Coefficients of Sound Absorption for ½ in. thickness of KILNOISE Acoustical Plaster, Type "A" Frequency 128 256 512 1024 2048 4096 NOISE REDUCTION COEFFICIENT

Coefficient .33 .33 .59 .74 .69 .72 .60 One of several tests giving same NOISE REDUCTION CO-EFFICIENT of .60. These tests can be obtained on request from the nearest Kelley Island office. (See last page.)

In KILNOISE ACOUSTICAL PLASTER, asbestos and rockwool fibers are woven together horizontally to form a mat, bonded by foamed lime. Fibers and lime are separated by interconnecting pores formed in mixing which dry in place after trowelling. Random perforations (at least 576 per square foot) are made in the surface of the porous mat through which the sound energy enters to be absorbed by dissipating its force in movement through and against the viscous sides of the channels in the KILNOISE.

- 2. Non-Gombustible The fallacy of building a fireproof building and using combustible decorative and acoustical materials has been most tragically demonstrated. KILNOISE will not ignite or support combustion, nor will it give off toxic fumes and smoke. This factor should be a major consideration when specifying acoustical materials for hotels, hospitals, and schools.
- 3. Low Cost—KILNOISE is an economical acoustical material. The ease of application reduces time and cost of plastering.

- 4. Pleasing Color and Texture The natural color is white. Its interesting texture is appropriate for use with any style of architecture.
- 5. Repaintable and Cleanable—KILNOISE may be painted with any water paint in accordance with our recommendations. Cleaning can be done with a buffing brush. It may also be washed with a sponge or brush, using mild soap solutions and rinsing with a sponge and clean water.
- 6. Monolithic Construction The beauty of a single expanse of ceiling, free of joints and completely level, which can be curved or angled to fit the decorative features desired, is one of the outstanding advantages of KILNOISE Acoustical Plaster.
- 7. Moisture Resistant—KILNOISE can be used under high humidity conditions, which makes it suitable for swimming pools, laundries, weaving rooms and similar buildings. KIL-NOISE was not affected after standing in an atmosphere of 100 per cent humidity at temperature of 110 degrees Fahrenheit for 17 days, during a test conducted at our laboratory.
- 8. Light Reflection Tests on a Taylor Sphere Reflectometer prove KILNOISE in its natural white color reflects 75% of the light that strikes it. This is most essential in eliminating eye fatigue.
- 9. Easy Application One of the prime materials in KILNOISE is Tiger Pressure Hydrated Finishing Lime, which is used in making white coat finish because of its great plasticity. It is said of this material that it "SPREADS LIKE WARM BUT-TER". This gives KILNOISE its easy, long spreading quality and assures the contractor of more yards of application per day.

### ARCHITECTURAL SPECIFICATIONS FOR KILNOISE ACOUSTICAL PLASTER

- 1. KILNOISE ACOUSTICAL PLASTER shall be applied to all areas as specified in the plans.
- 2. Material shall be KILNOISE ACOUSTICAL PLASTER as manufactured by The Kelley Island Lime and Transport Company, Leader Building, Cleveland, Ohio.
- 3. Mixing
  - A. KILNOISE shall be mixed by machine mixer.
  - B. The only ingredients of the mix shall be KILNOISE and clean water in the ratio of 100 lbs. KILNOISE to 150 lbs. (6 full twelve quart pails) of clean water.
  - C. The ingredients shall be agitated in the mixer for 15 minutes. (This increases the volume of the mix, by incorporating air cells in the material.)
  - D. Mixer shall be cleaned thoroughly at the end of the day's run.

- 4. Application
  - A. After mixing, KILNOISE is ready for application to any of the following base coats of plastering mortar:

Scratch coat on metal lath.

Scratch and brown coat on metal lath.
Bond coat on concrete.
3/8 inch brown coat on gypsum lath, hollow tile or brick. The base coat to which KILNOISE is applied should be dry and well scratched with a wire brush.

- B. KILNOISE shall be applied in two coats with a hawk and trowel by a practical plasterer. The first coat shall be 3/8 inch thick. After the first coat has dried for several hours, the second coat shall be applied to make the combined thickness of KILNOISE a minimum of 1/2 inch. Straighten all angles with a feather edge and using lightly a thin bevelled darby bring to a true and even surface.
- C. Follow immediately with a rice stippling brush, forming a pleasing texture. The following day, the entire area shall be nail stippled to give a uniform appearance.





Penn Fruit Market, Philadelphia, Pa. Thalheimer & Weitz, Archts.

Washington Irving School, Teaneck, N. J. Hacker & Hacker, Archts.

### KILNOISE JOBS

If you wish to inspect local work, our Division Offices (see last page) will provide you with other jobs near your office.

### EDUCATIONAL BUILDINGS

Public School No. 99, New York City
Architect: Board of Education
Wauseon High School, Wauseon, Ohio
Architect: Britsch and Munger
St. Xavier Academy, Ottawa, Ill.
Architect: A. F. Moratz
Immaculate Conception School, New York City
Architect: Eggers and Higgins
John M. Greene Hall, Smith College, Northampton, Mass.
Architect: Roudebush and Martin
Acoustical Engineer: Clifford Melville Swan

### HOSPITALS

Norristown State Hospital, Norristown, Pa.
Architect: Howell Lewis Shay
Central Islip State Hospital, Central Islip, L. I., N. Y.
Architect: William E. Haugaard, Commissioner of
Architecture

OFFICES AND INDUSTRIAL BUILDINGS
Egyptian Lacquer Co., South Kearny, N. J.
Engineers & Constructors: Brown and Matthews
Steber Manufacturing Co., Broadview, Ill.
Architect: Houlihan & Marks
Ingalls Steel Co., Birmingham, Ala.
Architect: Owner
Philco Radio Corp., Philadelphia, Pa.
Architect: M. Ward Easby, Inc.

### MARKETS, STORES AND SHOWROOMS

Old Dominion Electric Co., North Arlington, Va.
Architect: Corning and Moore
Aurora Motor Sales, Inc., Aurora, Ill.
Architect & Engineers: Elmer Gylleck and Associates
American Wholesale Furniture Co., Chicago, Ill.
Architect: Arthur Swanson & Associates

### OTHER TYPES OF BUILDINGS

McLean Dormitory Building, Washington, D. C.
Architect: Kenneth Franzheim
The First Mission Covenant Church, Chicago, Ill.
Architect: Godfrey E. Larson
Miami Recreation Center, Miami, Fla.
Architect: Steward & Skinner
Beverly Bowling Lanes, Inc., Chicago, Ill.
Architect: Kocher and Larson





THE BRUSH STIPPLER THE NAIL STIPPLER is used to texture the surface of Kilnoise. Overtrowelling tends to make the surface dense by closing the pores. The brush stippler eliminates the possibility of overtrowelling, assures a pleasing textured surface, and increases the exposed, sound absorptive area.

assures acoustical value. 144 random spaced nails are set in a 6" x 6" area, resulting in a minimum of 576 perforations per square foot in the Kilnoise surface treated. These perforations direct the sound energy to the porous, absorptive body of the Kilnoise plaster.



### MIXING INSTRUCTIONS

KILNOISE ACOUSTICAL PLAS-TER must be mixed in a plaster mixer in order to obtain the correct degree of foaming. In the usual mixer, a batch consists of two fifty pound bags of KILNOISE, which is combined with 150 pounds of clean water (six 12 quart pails). After these have been placed in the bin of the plaster mixer, they should be agitated for fifteen minutes. During the mixing, bubbles



will be formed throughout the mass and the volume of the plaster will be doubled. When the material is dumped from the mixer, it is ready for use by the plasterer.

### PACKING AND SHIPPING

KILNOISE is packed in convenient 50-pound paper sacks bearing the KILNOISE Trademark. Shipment can be made in mixed cars with other Kelley Island products.

Printed in U.S. A

# THE KELLEY ISLAND LIME & TRANSPORT CO.

World's Largest Producer of Lime and Limestone Products GENERAL OFFICES: Leader Building, CLEVELAND 14, OHIO

### DIVISION OFFICES

New York 9, New York Cleveland, Ohio Rockefeller Plaza Tel. Columbus 5-2400

Leader Building Tel. Main 5306

Atlanta, Georgia 22 Marietta St. Bldg. Tel. Walnut 5366



### SERVICES AND ADDITIONAL DATA

Kilnoise is made by the manufacturers of famous TIGER FINISH LIMES which have been specified by architects and used by plasterers for nearly half a century. This long experience in the production and use of fine lime has been incorporated in the latest product of this long established firm. Their long experience is available to architects in solving any plastering problems.

### OTHER TIGER PRODUCTS

TIGER FINISH HYDRATED LIME TIGER FINISH PRESSURE HYDRATED LIME TIGER MASONS HYDRATED LIME LUMP LIME PEBBLE LIME PULVERIZED LIME



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